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09/884,122	06/20/2001	David Zhuang	042390.P11278	3474

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EXAMINER	
AILES, BENJAMIN A	
ART UNIT	**PAPER NUMBER**
2142	

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,122	ZHUANG ET AL.	
	Examiner	Art Unit	
	Benjamin A. Ailes	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-9,12-21,24-32 and 39-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-9,12-21,24-32 and 39-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Amendment filed 16 September 2005.

2. Claims 1-3, 10, 11, 22, 23, 33-38, and 45-60 have been cancelled.

3. Claims 4-9, 12-21, 24-32, and 39-44 remain pending.

Specification

4. Amendments to the specification made by the applicant have been entered into the record and overcome the prior specification objections. The objections to the specification have been withdrawn.

Drawings

5. The amendment to the drawings, specifically the correction made to figure 9, has been entered into the record and overcomes the prior drawing objection. The objection to the drawings has been withdrawn.

Claim Objections

6. Amendments to the claims have been entered into the record and the prior claim objections have been overcome. The objections to the claims have been withdrawn.

Claim Rejections - 35 USC § 112

7. The amendment to claim 12 has been entered into the record and overcomes the 112, second paragraph, rejection set forth in the prior office action. The 112 2nd paragraph rejection of claim 12 has been withdrawn.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 4-9, 12-21, 24-32, and 39-44 are rejected under 35 U.S.C. 102(b) as being anticipated by MacNaughton et al. (U.S. 6,020,884), hereinafter referred to as MacNaughton.

10. Regarding claim 4, MacNaughton discloses a remote messaging facility client, comprising:

a session agent for managing a remote messaging session established between a web client and an event producer and for maintaining a persistent listening connection that listens to an event subscribed by the web client with a remote messaging facility server (col. 3, lines 60-66, col. 6, lines 41-47, and col. 7, lines 8-13);

a messaging agent for communicating with the remote messaging facility server on behalf of the web client during the remote messaging session, sending a request from the web client to the remote messaging facility server and receiving a response from the remote messaging facility server (col. 7, 10-20);

a message parser for parsing a response received by the messaging agent from the remote messaging facility server (col. 7, lines 27-36); and

an event manager for managing event subscription and dispatching of an event that is subscribed by the web client, received as a response from the remote messaging facility server, and parsed by the message parser (col. 9, lines 28-51).

11. Regarding claim 5, in accordance with claim 4, MacNaughton discloses the system further comprising:

a remote messaging facility client application programming interface, through which the web client communicates with the remote messaging facility client to issue a request, to subscribe an event, and to receive a response from the remote messaging facility server from the event manager (col. 9, lines 28-51).

12. Regarding claim 6, MacNaughton discloses a remote messaging facility server, comprising:

a session manager for managing a remote messaging session established with a web client via a remote messaging facility client and for maintaining a persistent listening connection that listens to an event subscribed by the web client, said web client issuing requests and receiving responses during the remote messaging session via the remote messaging facility client (col. 3, lines 60-66, col. 6, lines 41-47, and col. 7, lines 8-13, col. 7, 10-20);

a channel manager for managing zero or more channels designed for subscriptions of events, said managing associating each subscription with a channel to store the occurrences of the subscribed event and dispatching each stored event to the remote messaging facility client that represents the web client that subscribes the stored event (col. 9, lines 27-40); and

a message board comprising a plurality of slots for storing data, said data being manipulated by at least one event producer, manipulations of the data in said message board triggering different events (col. 4, lines 16-34, and col. 9, lines 41-49).

13. Regarding claim 7, in accordance with claim 6, MacNaughton discloses the system further comprising:

a message parser for parsing a request issued by a web client via a remote messaging facility client prior to generating a response for the request (col. 7, lines 27-36); and

a plurality of listener agents, each of which corresponding to a different slot in the message board and connecting to at least one channel that store subscribed event related to the slot, each listener agent listening to the subscribed event occurred in the slot and sending the subscribed event to a corresponding channel (col. 9, lines 27-40).

14. Regarding claim 8, in accordance with claim 7, MacNaughton discloses the system further comprising:

a producer registry for registering the at least one event producer (col. 9, lines 38-40);

an access control profile for recording access control information used by said session manager in managing a remote messaging session for a web client (col. 8, lines 58-60 and col. 13, lines 27-36); and

a base filter agent, connecting to the listener agents, for filtering a subscribed event prior to sending the subscribed event to a corresponding channel (col. 4, lines 35-41).

15. Regarding claim 9, in accordance with claim 8, MacNaughton discloses the system further comprising:

a remote messaging facility server application programming interface, through which the at least one event producer communicates with the remote messaging facility

server to register, to manipulate the message board, and to communicate with the web client (col. 4, lines 16-27).

16. Regarding claim 12, MacNaughton discloses a method for web-enabled 2-way remote messaging, comprising:

establishing a remote messaging session between a web client and an event provider via a remote messaging facility client, connecting to the web client, and a remote messaging facility server, connecting to an event producer, the web client issuing requests and receiving responses during the remote messaging session (col. 3, lines 60-66, col. 6, lines 41-47, and col. 7, lines 8-13);

subscribing, by the web client via the remote messaging facility client, an event that is related to an action performed by the event producer on a slot of a message board located in the remote messaging facility server (col. 3, lines 54-66, and col. 6, lines 30-34);

listening, by a listener agent in the remote messaging facility server, the event, the listener agent connecting to a channel, dedicated to the web client, and the slot, the listener agent receiving a notification when the action associated with the event is performed by the event producer on the slot (col. 4, lines 19-21, and col. 11, lines 42-50); and

dispatching the notification from the remote messaging facility server to the web client via a web server and the remote messaging facility client, said notification being encoded by the web server using a web protocol to generate a response (col. 9, lines 28-34).

17. Regarding claim 13, in accordance with claim 12, MacNaughton discloses the method wherein said requests includes at least one of:

a begin session request to start a remote messaging session (col. 9, lines 6-11);

an end session request to finish a remote messaging session (col. 9, lines 19-23);

a check session request to examine the status of a remote messaging session (col. 9, lines 53-60);

a subscribe event request to subscribe an event with the remote messaging facility server (col. 9, lines 6-11);

an unsubscribe event request to end a subscription of an event with the remote messaging facility server (col. 9, lines 19-23);

a query data request to inquiry a data item in the message board (col. 9, lines 60-64);

an listen event request to start a listening connection (col. 9, lines 60-64); and

a post message request to post a message from the web client to a message handler associated with a slot in the message board (col. 9, lines 60-64).

18. Regarding claim 14, in accordance with claim 13, MacNaughton discloses the method wherein said requests are encoded using a web protocol (col. 3, lines 54-65 and col. 6, lines 13-34).

19. Regarding claim 15, in accordance with claim 14, MacNaughton discloses the method wherein said responses are encoded by said web server using a web protocol (col. 3, lines 54-65 and col. 6, lines 13-34).

20. Regarding claim 16, in accordance with claim 15, MacNaughton discloses the method wherein

said web protocol used to encode the requests includes HyperText Transport Protocol (col. 6, lines 13-34); and

said web protocol used by said web server to encode the responses includes HyperText Transport Protocol (col. 6, lines 13-34).

21. Regarding claim 17, in accordance with claim 14, MacNaughton discloses the method wherein said establishing comprises:

sending a begin session request, by the web client via the remote messaging facility client and the web server, to the remote messaging facility server to establish the remote messaging session (col. 9, lines 6-11);

authenticating the web client with respect to the event producer to generate a decision of either positive or negative (col. 6, lines 35-41, and 61-66, and col. 13, lines 29-37); and

starting, by a session manager in the remote messaging facility server, the remote messaging session if the decision is positive (col. 7, lines 8-14).

22. Regarding claim 18, in accordance with claim 17, MacNaughton discloses the method wherein said subscribing comprises:

sending a subscribe event request to the session manager to subscribe the event, the subscribe event request specifying the slot and the action (col. 9, lines 6-11);

setting up, by the session manager, a channel to store the occurrences of the event (col. 9, lines 27-40); and

connecting the channel with the listener agent associated with the slot of the message board (col. 9, lines 27-40).

23. Regarding claim 19, in accordance with claim 17, MacNaughton discloses the method wherein said listening comprises:

sending an listen event request to the remote messaging facility server (col. 4, lines 19-21, and col. 11, lines 42-50);

setting up a listening connection, for the event subscribed in said subscribing, said listening connection associating with the channel dedicated to the web client (col. 4, lines 19-21, and col. 11, lines 42-50);

monitoring, by the listener agent connecting to both the channel and the slot, the action performed by the event producer on the slot that triggers the event (col. 4, lines 19-21, and col. 11, lines 42-50);

receiving the notification corresponding to the subscribed event when the action is performed by said event producer (col. 9, lines 28-34); and

adding, by the listener agent, the notification to the channel (col. 9, lines 27-40).

24. Regarding claim 20, in accordance with claim 19, MacNaughton discloses the method further comprising filtering the notification prior to adding the notification to the channel (col. 4, lines 35-41).

25. Regarding claim 21, in accordance with claim 19, MacNaughton discloses the method wherein dispatching comprises:

forwarding, by a channel manager that manages the channel, the notification to the web server (col. 9, lines 28-34);

encoding, by the web server, the notification using the web protocol to generate the response (col. 6, lines 13-34); and

sending the response to the web client via the remote messaging facility client (col. 9, lines 28-34).

26. Regarding claims 24 and 39, MacNaughton discloses a method for a remote messaging facility server, comprising:

establishing a remote messaging session based on a begin session request sent from a web client via a remote messaging facility client and a web server (col. 3, lines 60-66, col. 6, lines 41-47, and col. 7, lines 8-13);

subscribing an event based on a subscribe event request specifying a slot on a message board in the remote messaging facility server and an action, wherein the event is defined with respect to the action performed on the slot by an event producer (col. 3, lines 54-66, and col. 6, lines 30-34);

listening, by an listener agent activated by an listen event request, the event, the listener agent connecting to a channel set up for the remote messaging session and to the slot and generating a notification of the event when the action associated with the event is performed on the slot by the event producer (col. 4, lines 19-21, and col. 11, lines 42-50); and

dispatching the notification of the event to the web client as a response via the web server and the remote messaging facility client, said notification being encoded by the web server using a web protocol to generate the response (col. 9, lines 28-34).

27. Regarding claims 25 and 40, in accordance with claims 24 and 39, MacNaughton discloses the method wherein the establishing comprises:

receiving the begin session request from the web client, authenticating the web client (col. 9, lines 6-11, and col. 6, lines 35-41, and 61-66, and col. 13, lines 29-37); and

starting the remote messaging session if the authentication passes (col. 7, lines 8-14).

28. Regarding claims 26 and 41, in accordance with claims 24 and 39, MacNaughton discloses the method wherein the subscribing comprises:

receiving the subscribe event request from the web client (col. 9, lines 6-11);

setting up a channel associating with the remote messaging session (col. 9, lines 27-40); and

connecting the channel with a listener agent associated with the slot of the message board (col. 9, lines 27-40).

29. Regarding claims 27 and 42, in accordance with claims 24 and 39, MacNaughton discloses the method wherein the listening comprises:

monitoring the slot on the message board to observe the event related to the action to be performed by the event producer on the slot (col. 4, lines 19-21, and col. 11, lines 42-50);

receiving the notification when the event is observed (col. 9, lines 28-34); and

adding the notification to the channel set up for the remote messagin session (col. 9, lines 27-34).

30. Regarding claims 28 and 43, in accordance with claims 27 and 42, MacNaughton discloses the method further comprising:

Filtering, by a filter agent, the notification prior to said adding (col. 4, lines 35-41).

31. Regarding claim 29, in accordance with claim 24, MacNaughton discloses the method wherein said dispatching comprises:

forwarding, by the channel, the notification to the web server (col. 9, lines 28-34);

encoding, by the web server, the notification using the web protocol to generate the response (col. 6, lines 13-34); and

sending the response to the web client via the remote messaging facility client (col. 9, lines 28-34).

32. Regarding claim 30, in accordance with claim 24, MacNaughton discloses the method further comprising registering the event producer with the message board in the remote messaging facility server (col. 4, lines 16-27).

33. Regarding claim 31, in accordance with claim 30, MacNaughton discloses the method further comprising:

specifying a session agent that authenticates a web client for the event producer (col. 6, lines 35-41, and 61-66, and col. 13, lines 29-37); and

specifying a filtering agent that filters an observed event associated with the event producer (col. 4, lines 35-41).

34. Regarding claim 32, in accordance with claim 30, MacNaughton discloses the method further comprising updating, by an event producer, a slot of the message board (col. 4, lines 28-35).

35. Regarding claim 44, in accordance with claim 42, MacNaughton discloses the medium wherein said dispatching comprises:

forwarding, by a channel manager that manages the channel, the notification to the web server (col. 9, lines 28-34);

encoding, by the web server, the notification using the web protocol to generate the response (col. 6, lines 13-34); and

sending the response to the web client via the remote messaging facility client (col. 9, lines 28-34).

Response to Arguments

36. Applicant's arguments filed 16 September 2005 have been fully considered but they are not persuasive. The applicant argues on page 23 of REMARKS that MacNaughton does not appear to teach the claimed "persistent listening connection" and more specifically, as mentioned on page 22, the limitation of claims 4, 6, 12, 24, and 39, the embodiment including "a persistent listening connection that listens to an event subscribed by the web client with a remote messaging facility server." The Examiner respectfully disagrees with the applicant's position. The applicant discloses in the specification in paragraph [0043] the persistent listening connection being a connection wherein event notifications may be "pushed" from the server to the client. The Examiner contends that MacNaughton clearly discloses the ability for a client and server to be able to maintain a persistent connection (see col. 7, lines 9-13) and having the ability to send messages (notifications) back and forth (server to client, client to server) based on events that occur (col. 7, lines 13-17). Events are created in order to

produce a "trigger" which causes something to happen. As is well known in the art, in order for an event to be recognized, it must be heard, thereby creating the persistent "listening" connection as described by the applicant. MacNaughton discloses an example of this type of method in column 8, lines 7-10 wherein a server listens for the event to happen that a client is subscribed to and when the event occurs a notification is sent directly to the client. The example provided is a user (client) wishes to receive notifications about stocks (client subscribes to a service) and when specified intervals occur (the event occurs), a notification message is sent (pushed) from the server to the client. MacNaughton provides the example using an HTTP protocol, but it should be noted that MacNaughton discloses the methods are able to implemented in various protocols, including but not limited to FTP, IRC, etc. (see col. 7, lines 33-36). Thereby the applied art clearly provides a 2-way messaging system wherein notifications triggered by events are sent between a community server and a community client.

Conclusion

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beatriz Prieto
BEATRIZ PRIETO
PRIMARY EXAMINER

baa